

EXHIBIT 29

From: Neelam Sandhu [nsandhu@blackberry.com]
Sent: 11/7/2023 5:04:22 PM
To: Hill, Christin Joy [CHill@mofo.com]
CC: BlackBerry ELInv [BlackBerry_ELInv@mofo.com]; Neelam Sandhu [nsandhu@blackberry.com]
Subject: Follow Up RE: Confidential Meeting
Attachments: JJG; RE: 15 minutes with JJG; FW: 15 minutes with JJG; Declined: John Giamatteo | Neelam ; BB Cyber Security Weekly Leadership team Call; RE: Cylance Product Issues; RE: Cylance Product Issues; RE: Analyst Day

As requested on our call yesterday, attached are some documents that demonstrate JJG's harassment of me, which commenced after I did not respond positively to his suggestive comments.

- Attachment "JJG" has information I had previously sent to HR.
- Two attachments "15 minutes with JJG" that show that I have been trying to meet with him since September on SEM, which he knows from Kevin Easterwood on his team is for cost savings I am trying to drive for the company, but he has been pushing the meeting off. He pushed the meeting off until end of September originally, then to November 3 (at the same time I had heard that he had told people in the company that 'if John Chen and Neelam aren't gone from the company by November 3rd I [JJG] am resigning.' Yesterday his EA asked to move the meeting to November 8, which we did, and today he has completely declined the meeting (attachment "Declined: John Giamatteo | Neelam").
- Attachment "BB Cyber Security Weekly Leadership team Call" where he asked me and three others to join his weekly team call. I agreed to join as often as I could however I did not receive the invite for several months. The other three people on the email received the invite right away. JJG then proceeded to tell others, including John Chen, that I was not attending the meetings and so am not collaborative – commentary which was negatively impacting my reputation in the company. I asked for the invite several times (e.g. attachment "Cylance Product Issues") before receiving it several months later.
- This was a pattern for JJG – telling me he would invite me to meetings but then not sending me the invite, while sending it to all others. He would then tell people I refused to attend and am not collaborative. He put me in the uncomfortable position of having to prove I was 'nice' and 'collaborative' and to do so with someone who was harassing me. Second attachment "Cylance Product Issues" is another such meeting.
- Attachment "Analyst Day" shows him taking credit for an Elite Customer deal I had closed, which the customer had not at the time given me approval to allude to publicly or mention publicly at the time. JJG mentioned it publicly at Analyst Day as though it were one of his deals and when I asked him he denied mentioning it and then did not reply to my follow up email with a link to the recorded proof.

These are just some examples.

Neelam

From: John Giamatteo [jig@blackberry.com]
Sent: 10/26/2021 6:39:45 PM
To: Billy Ho [bho@blackberry.com]; Sean Shea [sshea@blackberry.com]; John Routa [jrouta@blackberry.com]; Neelam Sandhu [nsandhu@blackberry.com]
Subject: BB Cyber Security Weekly Leadership team Call

Team,

I just wanted to let you know we are re-engineering the Cyber Business Unit weekly leadership team meetings.

We will be moving to a 2 hour format every Monday at 11:00am est (10am cst; 8am pst). We will spend the first 45-60 minutes of each call on the in-quarter forecast/pipeline and actions we as a team need to take achieve our goals. The second hour will be a mix functional updates ranging from product and engineering updates, to marketing and channel updates, to financial (P&L) and people updates (HR metrics/programs). Finally, we will go around the horn so every member of the team can provide a brief update/request/action which he or she may have for the group.

I would appreciate it, as very important members of the team, if you can participate each week with us. If this schedule conflicts with other meetings you might have, please send a delegate to represent your particular function. If possible.

I know this format will be a work in progress, but I am confident our weekly sync call as a team will help communicate and execute more effectively.

Thanks so much for you partnership.

Best regards,
JIG

From: Neelam Sandhu [nsandhu@blackberry.com]
Sent: 1/20/2022 5:30:13 PM
To: John Giamatteo [jig@blackberry.com]
Subject: RE: Cylance Product Issues

Hi – thanks for the chat today. This is the second note I mentioned.

Shall I ping Jenifer for the invite or do you prefer to? To reiterate, I'm happy to join as often as possible.

Neelam

From: Neelam Sandhu
Sent: Thursday, November 18, 2021 12:40 PM
To: John Giamatteo <jig@blackberry.com>
Subject: RE: Cylance Product Issues

Great. See you at the FERs meeting later.

I'll look out for the invite to your weekly meeting and join whenever I can.

Thanks,
Neelam

From: John Giamatteo <jig@blackberry.com>
Sent: Tuesday, November 16, 2021 7:44 AM
To: Neelam Sandhu <nsandhu@blackberry.com>
Subject: RE: Cylance Product Issues

Agreed...a great place to collaborate, Neelam.

On our weekly cyber BU staff call yesterday, which you are always welcome to participate in, I asked Billy and Alex to coordinate a meeting this week to review the FER's in queue with [REDACTED]. I want to get a handle on the magnitude of FERs and the scope of what we are working on. Afterwards, we need a coordinated communication effort with their technical team and executives to assure them we are addressing their needs.

I'll ask Jen to loop you in the invite...I believe it is Thursday.

Thanks,
JIG

From: Neelam Sandhu <nsandhu@blackberry.com>
Sent: Monday, November 15, 2021 4:59 PM
To: John Giamatteo <jig@blackberry.com>
Subject: FW: Cylance Product Issues

John,

This seems like a good example of where we can collaborate.

[REDACTED] naturally I know the full picture of them very well as they're Elites and my team and I talk to them weekly if not more often, and there are several initiatives in progress with them. I mentioned below that my team and I

have the background and latest on their FERs too. I understand there was a discussion this morning on them and there'll be a meeting later this week as well in San Ramon. That's great as their FERs need movement behind them. Thanks for your support with that. Wouldn't it make sense for you and I to be having those discussions too? Value is internal efficiencies, benefit the customer that we don't have disparate engagements with them, etc.

Ps I'm sure you are aware but it's worth highlighting that, the Cylance FERs issue goes beyond [REDACTED] [REDACTED] [REDACTED] Others are not Elite customers, such as [REDACTED] (I heard [REDACTED] [REDACTED] [REDACTED] have said they are leaving us though but I'm not certain that's definitive). It may make sense to look at this issue holistically.

Let me know what you think or if I misunderstood anything?

Thanks,
Neelam

From: Neelam Sandhu <nsandhu@blackberry.com>
Sent: Saturday, November 13, 2021 5:02 PM
To: John Giamatteo <jjg@blackberry.com>; John Chen <john.chen@blackberry.com>; Tony Lee <antlee@blackberry.com>; Alex Willis <awillis@blackberry.com>; Billy Ho <bho@blackberry.com>; Adam Enterkin <aenterkin@blackberry.com>; Karl Liebman <kliebman@blackberry.com>
Cc: Sasha Herakovic <sherakovic@blackberry.com>
Subject: Re: Cylance Product Issues

Great. Thank you.

I do engage with their CISO's (and some of their team members). And my team + support + guard + sales engineering, etc. engage with many people at [REDACTED]. There's a good understanding of what they need/is their highest priority.

We can provide a prioritized list. We went through that exercise with [REDACTED] for example a year+ ago and meet with them on it fairly regularly.
Alex has this but we can refresh it with the customers and the teams.

Neelam

Sent using BlackBerry UEM - the most secure and highest productivity mobility software

From: jjg@blackberry.com
Sent: November 13, 2021 4:46 PM
To: john.chen@blackberry.com; antlee@blackberry.com; awillis@blackberry.com; bho@blackberry.com; aenterkin@blackberry.com; nsandhu@blackberry.com; kliebman@blackberry.com
Cc: sherakovic@blackberry.com
Subject: RE: Cylance Product Issues

Thanks, JC...I will run with this with specific emphasis on [REDACTED].

We need to put a motion cross functional tiger teams and engage with the tech staff on prioritizing issues and functionality they are clamoring for, while Neelam and team provide air cover with the exec team. We will discuss more actions/alignment while we are all together on our staff call Monday morning.

Best regards,
JJG

From: John Chen <john.chen@blackberry.com>
Sent: Saturday, November 13, 2021 1:49 PM

To: Tony Lee <antlee@blackberry.com>; Alex Willis <awillis@blackberry.com>; Billy Ho <bho@blackberry.com>; Adam Enterkin <aenterkin@blackberry.com>; John Giamatteo <jjg@blackberry.com>; Neelam Sandhu <nsandhu@blackberry.com>; Karl Liebman <kliebman@blackberry.com>
Cc: Sasha Herakovic <sherakovic@blackberry.com>
Subject: Re: Cylance Product Issues

Team

We have so many people involve here
I will speak with JG to discuss the leadership and smaller team to tackle the two accounts as well as the bigger process

John G
Please give me a call, I will bum you the number

John

Sent from my BlackBerry - the most secure mobile device

From: antlee@blackberry.com
Sent: November 13, 2021 2:39 AM
To: john.chen@blackberry.com; awillis@blackberry.com; bho@blackberry.com; aenterkin@blackberry.com; jjg@blackberry.com; nsandhu@blackberry.com; kliebman@blackberry.com
Cc: sherakovic@blackberry.com
Subject: Re: Cylance Product Issues

Good day John,

If by algorithms, you mean FER intake process and prioritization then yes. We don't need to invent a feature request (FER) inbound process – we just need to copy the people that got it right.

Perfect example from Microsoft that allows submission, upvote, tracking, and more:
<https://ideas.powerbi.com/ideas/>

We currently perform this tracking using humans and disparate systems which does not paint an accurate picture of weighting and value of requests.

Hope that helps,
Tony

Tony Lee
Vice President, Global Services Technical Operations; Spark Division
Mobile: [+1 \(540\) 558-8987](tel:+15405588987)
BlackBerry® Intelligent Security. Everywhere.

From: john.chen@blackberry.com
Sent: November 13, 2021 12:08 AM
To: awillis@blackberry.com; antlee@blackberry.com; bho@blackberry.com; aenterkin@blackberry.com; jjg@blackberry.com; nsandhu@blackberry.com; kliebman@blackberry.com
Cc: sherakovic@blackberry.com; antlee@blackberry.com
Subject: RE: Cylance Product Issues

Thanks Alex

Anyone has ideas to improve the algorithms ?? I will be happy to review

As a reminder to all, we set the FERs quota so we don't chase everything and end up doing none with poor quality and slip everyone
Some FERs are complex and some are relatively simple ; Alex will apply his knowledge on that as he outlines with sales consideration

John

From: Alex Willis <awillis@blackberry.com>

Sent: Friday, November 12, 2021 4:01 PM

To: John Chen <john.chen@blackberry.com>; Tony Lee <antlee@blackberry.com>; Billy Ho <bho@blackberry.com>; Adam Enterkin <aenterkin@blackberry.com>; John Giamatteo <jjg@blackberry.com>; Neelam Sandhu <nsandhu@blackberry.com>; Karl Liebman <kliebman@blackberry.com>

Cc: Sasha Herakovic <sherakovic@blackberry.com>

Subject: RE: Cylance Product Issues

Yes, I'm familiar. [REDACTED] make up a great deal of our SPL (attached: reviewed, responded to by PM) each round as they started with about 43 FERs all by themselves. Some have been delivered over the years and we focus on the highest priority remaining (about 8)

I help facilitate the SPL (top 10 UEM and top 25 UES) requests pulled from

- FERs that are blocking deals, weighted towards the number of customers asking for a particular request, deal value, etc
- Strategic customer requests – not necessarily a deal in play today but needed for future renewals, expansion
- Market demand – whether a customer demands or not, we know these are required or going to be required. An example is UES support for windows firewall configuration. We see this on many RFP's. We put this in the top 10 UES priority list and it's marked as "Future backlog" by PM

Very difficult to land on the perfect 10/25 items given we have so many requests to prioritize. The current SPL, submitted in October actually had:

UEM = 43 items. Of which, 1 is committed, 1 other is on the roadmap but not committed

UES = 57 items. Of which 0 are committed, 6 are on the roadmap but not committed.

What doesn't get delivered in this next version must be re-evaluated for submission on the next SPL (after next major release). Some go away as we lost the deal, others remain.

Also note, the SPL is a snapshot in time, submitted soon after a major release. We constantly receive (and try to work around) requests throughout the quarter via various sources. Anyone can enter an FER so I tend to focus on ones in the categories I listed up top

Alex

From: John Chen <john.chen@blackberry.com>

Sent: Friday, November 12, 2021 5:35 PM

To: Tony Lee <antlee@blackberry.com>; Billy Ho <bho@blackberry.com>; Adam Enterkin <aenterkin@blackberry.com>; John Giamatteo <jjg@blackberry.com>; Neelam Sandhu <nsandhu@blackberry.com>; Karl Liebman <kliebman@blackberry.com>; Alex Willis <awillis@blackberry.com>

Cc: Sasha Herakovic <sherakovic@blackberry.com>

Subject: RE: Cylance Product Issues

Alex

Are you familiar with this ? since you picked the top 20 FERS , I assume you are aware;
Any lights you are shed will be great

John

From: Tony Lee <antlee@blackberry.com>
Sent: Friday, November 12, 2021 1:09 PM
To: John Chen <john.chen@blackberry.com>; Billy Ho <bho@blackberry.com>; Adam Enterkin <aenterkin@blackberry.com>; John Giamatteo <jig@blackberry.com>; Neelam Sandhu <nsandhu@blackberry.com>; Karl Liebman <kliebman@blackberry.com>
Cc: Sasha Herakovic <sherakovic@blackberry.com>
Subject: RE: Cylance Product Issues

Good afternoon John,

Per your request, please see the high-level customer views below for [REDACTED] gathered from the field. We are doing our best to hold the accounts together via professional services and support, however I do not believe this will be enough – these customers are beyond the kind words of “strategy and partnership” and they want to see results. We all wish we could say these are issues of the past and we can move beyond them, however the continued instability (console, optics, syslog, SSL cert, etc.) combined with the product release issues (1580, 1584, Optics 3.0) are keeping wounds fresh for these customers (at least 2 new stability issues this week alone).

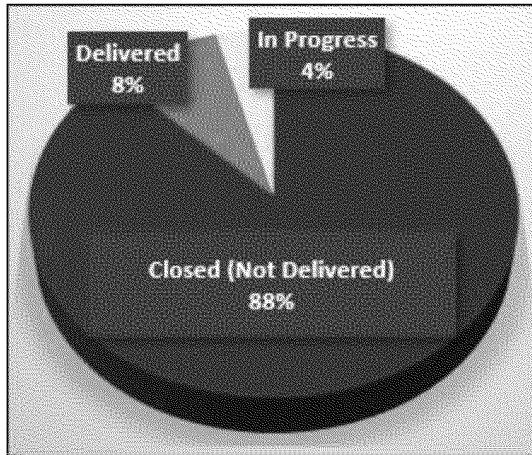
I understand the FER word below is not popular in the customer view below, however [REDACTED] in particular told us they do not want anymore “vision presentations” – they do want to see a locked in product roadmap with hard dates that cover some of the features they requested. These customers are angry and it shows in their email correspondence while they hold very little back. Hugh (on Neelam’s team) has an excellent strategy to help steer the conversation away from specific FERs and more toward larger epics, but it is still too early to tell how effective it will be. You will notice a common theme below and honestly we can swap nearly any medium to large UES customer name in and it still applies. In fact, we just lost the [REDACTED] renewal and their reason for leaving was similar to [REDACTED], and [REDACTED]

<ul style="list-style-type: none">• Failure to deliver on many of the FER’s they requested• Missed/inconsistent release cycles• New OS support -- Late support for new Mac OS in particular.• Kernel support very slow. Cannot install Protect as kernel not yet supported• Supportability of older protect versions• Old malware misses – Excel Macro – Need to execute on long-term fix• How are we improving the product? The quality?• 1580 concerns -- Felt 1540 was the last stable release of Protect• NOC stability• Optics performance issues• RCA’s for issues• Service availability notifications	<ul style="list-style-type: none">• Failure to deliver on many of the FER’s they requested or delayed (see below)• Missed/inconsistent release cycles• How are we improving the product? The quality?• New releases lack requested new features• Console issues when we have made changes e.g. memdef2/sc2• Old malware misses – Excel Macro• 1580 concerns• API and audit log limitations

From the customer’s perspective (as for SE), please see the attached PowerPoint document. We looked up the present day status of the FERS they submitted and color coded them. Most, almost all, are *closed and marked as “Future Consideration”* (red) – with the exception of one in progress (yellow) and two that indicate that they are delivered (green). When any customer—especially our elite 30—sees that 92% of their feature requests (many of which they consider table stakes) are not delivered over the years then they lose hope and a renewal is unlikely. Hugh will only be so successful in changing the narrative – results will need to follow. I know we are all dedicated to our customer’s

success so I am glad we were able to have this discussion. Our customers are very vocal in their concerns, now we need to gather, prioritize, and execute.

- **In Progress = 1**
- **Delivered = 2**
- **Closed = 21**



Hope that helps.

Thanks,
Tony

Tony Lee

Vice President, Global Services Technical Operations
BlackBerry Security Services
Mobile: +1 (540) 558-8987
BlackBerry® Intelligent Security. Everywhere.

From: John Chen <john.chen@blackberry.com>

Sent: Thursday, November 11, 2021 8:56 AM

To: Tony Lee <antlee@blackberry.com>; Billy Ho <bho@blackberry.com>; Adam Enterkin <aenterkin@blackberry.com>; John Giamatteo <jig@blackberry.com>; Neelam Sandhu <nsandhu@blackberry.com>; Karl Liebman <kliebman@blackberry.com>

Cc: Sasha Herakovic <sherakovic@blackberry.com>

Subject: Re: Cylance Product Issues

Tony

Do you have a high level customer views of the recent product releases and the Marco misses etc

I like to take a look

John

Sent from my BlackBerry - the most secure mobile device

From: antlee@blackberry.com

Sent: November 11, 2021 5:44 AM

To: bho@blackberry.com; aenterkin@blackberry.com; jjg@blackberry.com; john.chen@blackberry.com; nsandhu@blackberry.com; kliebman@blackberry.com
Cc: sherakovic@blackberry.com
Subject: Re: Cylance Product Issues

Sounds great Billy. [REDACTED] [REDACTED] are also quite unhappy with recent product releases, macro misses, and missing features -- we could use some support there as well.

Thanks for the assistance,
Tony

Tony Lee
Vice President, Global Services Technical Operations; Spark Division
Mobile: [+1 \(540\) 558-8987](tel:+15405588987)
BlackBerry® Intelligent Security. Everywhere.

From: bho@blackberry.com
Sent: November 11, 2021 1:37 PM
To: aenterkin@blackberry.com; jjg@blackberry.com; john.chen@blackberry.com; nsandhu@blackberry.com; kliebman@blackberry.com
Cc: sherakovic@blackberry.com; antlee@blackberry.com
Subject: RE: Cylance Product Issues

Yes. We had several [REDACTED] calls with product SME in the past. We will continue to do it. Let's have a prep call and determine the topics and who from engineering. I can be available.

In fact, I have repeatedly suggested to resume/start the technical sessions with customers. They see what we're doing and making progress to support them.

Regards,
Billy

Sent with BlackBerry Work
(www.blackberry.com)

From: Adam Enterkin <aenterkin@blackberry.com>
Date: Thursday, Nov 11, 2021, 5:24 AM
To: Billy Ho <bho@blackberry.com>, John Giamatteo <jjg@blackberry.com>, John Chen <john.chen@blackberry.com>, Neelam Sandhu <nsandhu@blackberry.com>, Karl Liebman <kliebman@blackberry.com>
Cc: Sasha Herakovic <sherakovic@blackberry.com>, Tony Lee <antlee@blackberry.com>
Subject: RE: Cylance Product Issues

Thank you Billy.
Is there anyone that is a domain expert for Cyber on your team that you recommend we put in front of the customer? If not, that's okay, we can cover from sales but it sometimes is effective for a customer to hear directly from someone who owns the Product, especially when they are as big as [REDACTED] (350k+ end points)

Best regards,
Adam
+44 7557 244 581

Sent with BlackBerry Work

From: Billy Ho <bho@blackberry.com>

Date: Thursday, 11 Nov 2021, 12:57 pm

To: Adam Enterkin <aenterkin@blackberry.com>, John Giamatteo <jjg@blackberry.com>, John Chen <john.chen@blackberry.com>, Neelam Sandhu <nsandhu@blackberry.com>, Karl Liebman <kliebman@blackberry.com>

Cc: Sasha Herakovic <sherakovic@blackberry.com>, Tony Lee <antlee@blackberry.com>

Subject: RE: Cylance Product Issues

Let me send a separate email on [REDACTED]

You should have the update before Wednesday.

Regards,
Billy

Sent with BlackBerry Work
(www.blackberry.com)

From: Adam Enterkin <aenterkin@blackberry.com>

Date: Thursday, Nov 11, 2021, 2:28 AM

To: John Giamatteo <jjg@blackberry.com>, John Chen <john.chen@blackberry.com>, Neelam Sandhu <nsandhu@blackberry.com>, Billy Ho <bho@blackberry.com>, Karl Liebman <kliebman@blackberry.com>

Cc: Sasha Herakovic <sherakovic@blackberry.com>, Tony Lee <antlee@blackberry.com>

Subject: RE: Cylance Product Issues

Thanks John G.

Agreed, one team and we are all in this together!

We have major challenges with the perception of the product, although I think it is largely due to two factors, tactical problems in our current product and lack of major advancement in our roadmap compared with CS and S1. Much of it is unfair but when every analyst is saying we are in the back of the pack, and then they experience small tactical problems, CISOs have a very difficult time defending why they chose to go with us to their managers. We hear this daily.

We need to come out swinging. We need a solid roadmap that shows how we are going to fix where are in the market and these dec issues.

Billy, I am meeting with the Global CTO of [REDACTED] in person next Wednesday about this very topic in hopes of saving them as a customer. They are concerned about the following:

- How are we improving the product? The quality?
- Failure to deliver on many of the FER's they requested ([REDACTED] believed they would have more influence on prod dev)
- Missed/inconsistent release cycles
- New releases lack requested new features
- OS support. Late support in past for new Mac OS.
- Old malware misses
- Gartner Magic Quadrant results. Seems there is agreement in the industry that BB is not suitable for Enterprise requirements.
- 1580 concerns
- Memory bypasses
- Agents not connecting back to the console - How do we audit for this?

I would be delighted to have someone from your team who is an expert in Cyber and can help make them more comfortable with the above. Is there anyone you would volunteer to join who can address the above?

Again, we need solid answers to how we will fix and a roadmap that explains what we are doing that is compelling to them.

Best regards,
Adam
+44 7557 244 581

Sent with BlackBerry Work

From: John Giamatteo <jjg@blackberry.com>
Date: Thursday, 11 Nov 2021, 2:50 am
To: John Chen <john.chen@blackberry.com>, Neelam Sandhu <nsandhu@blackberry.com>, Billy Ho <bho@blackberry.com>, Karl Liebman <kliebman@blackberry.com>
Cc: Sasha Herakovic <sherakovic@blackberry.com>, Tony Lee <antlee@blackberry.com>, Adam Enterkin <aenterkin@blackberry.com>
Subject: RE: Cylance Product Issues

Absolutely, John...we need to look at these items individually, determine root cause and remediate asap.

Billy is on point from a product standpoint, Karl, Sasha and Tony on point for customer engagement/communications and Neelam/Adam on point from a customer relations perspective.

We need a ONE team approach and focus on what is urgent and in front of us now vs. dwelling too much on the past.

More to come on this.

Best regards,
JJG

From: John Chen <john.chen@blackberry.com>
Sent: Wednesday, November 10, 2021 3:18 PM
To: Neelam Sandhu <nsandhu@blackberry.com>; Billy Ho <bho@blackberry.com>; John Giamatteo <jjg@blackberry.com>; Karl Liebman <kliebman@blackberry.com>
Cc: Sasha Herakovic <sherakovic@blackberry.com>; Tony Lee <antlee@blackberry.com>
Subject: RE: Cylance Product Issues

Hope you all could find a way to work together better. I know all of you want to do well for the company

John G , you can probably help here

John

Sent with BlackBerry Work (www.blackberry.com)

From: Neelam Sandhu <nsandhu@blackberry.com>

Sent: Nov 10, 2021 3:14 PM

To: Billy Ho <bho@blackberry.com>; John Chen <john.chen@blackberry.com>; John Giamatteo <jjg@blackberry.com>; Karl Liebman <kliebman@blackberry.com>

Cc: Sasha Herakovic <sherakovic@blackberry.com>; Tony Lee <antlee@blackberry.com>

Subject: RE: Cylance Product Issues

Billy,

Thank you. There have been and continue to be many internal discussions on these items (and more), e.g. the UES account reviews, the supportability council meetings, the weekly customer confidence emails, the dialogues in real-time as the issues are occurring, etc.

This is not about blame. The key here is how we retain our customers as the volume of issues is problematic and seemingly increasing. Just a couple of hours ago we received an email from [REDACTED] for example, saying "We are not receiving the alerts in Cylance from past 3+ hours."

We can call them BlackBerry issues, rather than distinguish between product issues and architecture issues or other nomenclature, and as we are all in this together and have the same objective of customer retention and revenue growth.

Neelam

From: Billy Ho <bho@blackberry.com>

Sent: Wednesday, November 10, 2021 1:39 PM

To: Neelam Sandhu <nsandhu@blackberry.com>; John Chen <john.chen@blackberry.com>; John Giamatteo <jjg@blackberry.com>; Karl Liebman <kliebman@blackberry.com>

Cc: Sasha Herakovic <sherakovic@blackberry.com>; Tony Lee <antlee@blackberry.com>

Subject: Re: Cylance Product Issues

Neelam,

Before you jumped into conclusion "numerous issues related to the Cylance products" and sent this big email to everyone. You should get more details before criticize all these are product issues. You didn't bring these issues to me before. Otherwise, I'm more than happy to help you to understand.

Let me cut and paste what you said earlier and sent back to you – "it is impacting us as BlackBerry so we don't have the luxury of playing the blame game. We need to focus on working together to retain these customers and grow the business."

Please see my comment below. Please come by and we can sit down to discuss this.

Regards

Billy

From: Neelam Sandhu <nsandhu@blackberry.com>

Date: Wednesday, November 10, 2021 at 8:11 AM

To: John Chen <john.chen@blackberry.com>, John Giamatteo <jjg@blackberry.com>, Billy Ho

<bho@blackberry.com>, Karl Liebman <kliebman@blackberry.com>

Cc: Sasha Herakovic <sherakovic@blackberry.com>, Tony Lee <antlee@blackberry.com>

Subject: Cylance Product Issues

Dear All,

In the past month alone we have had numerous issues related to the Cylance products. I am summarizing just some of them here to give everyone a sense of how regularly our Cylance customers are experiencing notable product problems. The frequency appears to be increasing and customers are saying they have had enough.

Additionally, Reddit users are aware of the issues and have been posting about them on Reddit. (Mark Wilson is handling the Reddit piece per attached, in conjunction with relevant technical experts.)

November 9th

- UES EU console went down. Multiple customers impacted. Root cause not yet confirmed.
- For example, [REDACTED] 180,000 endpoints disappeared from their console today. Endpoints are reappearing but they have lost their configurations/zoning/policies/etc. and so will need to be re-mapped. Additionally, some endpoints may require a manual effort to re-add/re-register as they are not auto reappearing/reregistering. (We have a fix plan for [REDACTED])

BHO>> So far, there is NO evidence it is product issue

BHO>> this instance happened on Tuesday 2am our time in the middle of the night. within the first 24 hours, CSO and Engineering are pull in to help customers to recover. I hope that customer appreciate the support.

BHO>> we just got the audit log this morning. From the audit log, it indicated someone is deleting 160,000 end-points.

November 9th (Also note the 1580 update at the bottom of this email. It is relevant as it is one of the versions customers are being advised to upgrade to)

- Customers informed by BlackBerry that Protect 1574 has a security vulnerability and they must upgrade to 1578 or later.
- However, older endpoints that are in use by customers (expensive, long life, endpoints that are hard to replace and are used by several of our customers) are not supported by Protect versions later than 1564.
- BlackBerry Engineering were asked if a hotfix version could be created for 1564 and the response currently is no. This will mean any customer that has a legacy OS machine [REDACTED] will have to either continue to use an affected version of BlackBerry Protect or decide to use another vendors solution. Furthermore, this means we have not given customers lead time/a notice period on this before the security vulnerability communication went out on November 9.
- Example affected customer: [REDACTED] currently have 10K endpoints, with a lot of SCADA systems which are managed by old Windows platforms. Testing of 1564 was successfully completed a few months ago to validate the impact of BlackBerry Protect on their devices to ensure that, the robots could still continue to build cars when Protect is running. [REDACTED] need to be able to use 1564 for 3-5 more years at least.

BHO>> 3 security vulnerabilities were report from external researcher to BBSIRT. Working closely with BBSIRT to provide the hotfix in 1578 before the vulnerability disclosure by the external researcher.

BHO>> Who said we didn't create hotfix for 1564? I replied to Adam Enterkin that we are looking into it. NS: This came from Engineering and Support.

BHO>> In fact, we should work as the trusted advisors, we should advise them to upgrade legacy Window platforms. They are NOT supported by Microsoft and have lot of vulnerabilities at the OS level.

October 28th

- Another customer impacted by macro virus. BlackBerry had decided not to build this functionality into Protect as we thought macro viruses are old virus types. It exists in OEM Engine/CylanceV and needs to be added to Protect.
- BlackBerry Engineering "looking to address this in upcoming releases, but that would be in Q1 2022 or later".
- Customers recently affected by old macro viruses: [REDACTED]

BHO>> This is why I repeatedly suggested to you that we can't talk to our customers at FER level (i.e. yes or no, what time). We need to engage them at engineering technical workshop level. We should walk through we're doing instead of just saying yes/no and what time. NS: We don't say yes/no.
BHO>> Protect is single-ML-model agent (on execution files). need to move Protect to a multi-ML- model agent (support both execution file and document file). Work in progress.
BHO>> the CylanceV doesn't support Excel. We need to look into AMSI to support Excel
BHO>> then UI changes to Venue console.

October 25th

- UES Console - Optics portion has no data and displays errors on multiple pages, such as Error 502.
- Many affected customers including Deloitte.

BHO>> It is NOT product issue.

BHO>> it is infrastructure related

October 20th

- Cylance console unable to be accessed by customers as BlackBerry accidentally let a Cylance infrastructure certificate expire.
- Customers saw the 'certificate expired' message in the console and said 'BlackBerry can't even get this right'. Screenshots made it on to Reddit https://www.reddit.com/r/Cylance/comments/qbzzrf/security_100/.

BHO>> Again, it is NOT product issue.

BHO>> it is infrastructure issue.

October 14th

- Customers after upgrading to Protect 1584 see IIS services crashing on endpoints.
- CSO had recommended the IIS crash issue gate the release, but it was declined by PM/Engineering leadership due to other fixes needing to be released.
- MSSPs (Cyberforce and Skout) report their customers' IIS crashes triggered a large number of helpdesk tickets. One Cyberforce customer claims they lost \$700K as a result.

BHO>> Sorry you are wrong. IIS crash is NOT reported before we release.

BHO>> Btw, CSO is part of the go-no-go decision. NS: This came directly from CSO.

October 13th for several days

- Optics syslog outage. This lasted a few days. Services impacted were e.g. Optics UI not populating – Optics Syslog, InstaQuery not loading the Zones.
- Root cause was unoptimized code caused resource starvation. Resolution was to deploy additional hardware and optimize code to relieve starvation.
- Impacted customers. Also meant Guard team lost visibility causing two incident response (IR) engagements to stall for several weeks for [REDACTED].

BHO>> yes. this one is a product defect when we release Optics-3.0 that timing issue with one of the async operation.

September 23rd and 30th

- Multi-hour Cylance infrastructure incidents where customers are unable to see Cylance products to download from the deployment page in Venue for the EMEA region.

BHO>> Yes. this one is a product defect with Venue cloud 1.51.

August 18th

- 1580 released in US and customers experiencing high volume of exploit block issues.
- Before 1580, Macros showed up in Script Control as a module that could be easily disabled or tuned with wildcard exclusions. With 1580, they show up under memory protection as "Dangerous VBA Macro (Windows Only)" and this feature CANNOT be disabled. The only way to tune these is to completely exclude a given process (like excel.exe or msaccess.exe) which leads to much worse security posture as it effectively turns off Memory Protection monitoring for MS Office Products.

- BlackBerry Engineering said: "The underlying implementation was changed significantly without thinking through all the consequences throughout the product. They acknowledged the miss due to the lack of clearly defined end-to-end requirements. A formal post-mortem may not be completed due to many of the key players no longer being at BlackBerry."

BHO>> it is more than a product defect issue. It is a Cylance methodology issue (from great ideas, reverse-engineering, to beta/EA process).

There have been other issues in this timeframe but the above list gives a flavor.

Neelam Sandhu

SVP & Chief Elite Customer Success Officer

Office: +1 (925) 242 5636

Mobile: +1 (201) 912 5267

BBMe PIN: EF089DE9

Email: nsandhu@blackberry.com

From: John Giamatteo [jig@blackberry.com]
Sent: 11/16/2021 7:43:34 AM
To: Neelam Sandhu [nsandhu@blackberry.com]
Subject: RE: Cylance Product Issues

Agreed...a great place to collaborate, Neelam.

On our weekly cyber BU staff call yesterday, which you are always welcome to participate in, I asked Billy and Alex to coordinate a meeting this week to review the FER's in queue with [REDACTED] [REDACTED] [REDACTED]. I want to get a handle on the magnitude of FERs and the scope of what we are working on. Afterwards, we need a coordinated communication effort with their technical team and executives to assure them we are addressing their needs.

I'll ask Jen to loop you in the invite...I believe it is Thursday.

Thanks,
JJG

From: Neelam Sandhu <nsandhu@blackberry.com>
Sent: Monday, November 15, 2021 4:59 PM
To: John Giamatteo <jig@blackberry.com>
Subject: FW: Cylance Product Issues

John,

This seems like a good example of where we can collaborate.

[REDACTED] [REDACTED] [REDACTED] naturally I know the full picture of them very well as they're Elites and my team and I talk to them weekly if not more often, and there are several initiatives in progress with them. I mentioned below that my team and I have the background and latest on their FERs too. I understand there was a discussion this morning on them and there'll be a meeting later this week as well in San Ramon. That's great as their FERs need movement behind them. Thanks for your support with that. Wouldn't it make sense for you and I to be having those discussions too? Value is internal efficiencies, benefit the customer that we don't have disparate engagements with them, etc.

Ps I'm sure you are aware but it's worth highlighting that, the Cylance FERs issue goes beyond [REDACTED] [REDACTED] [REDACTED]. Others are not Elite customers, such as [REDACTED] (I heard [REDACTED] have said they are leaving us though but I'm not certain that's definitive). It may make sense to look at this issue holistically.

Let me know what you think or if I misunderstood anything?

Thanks,
Neelam

From: Neelam Sandhu <nsandhu@blackberry.com>
Sent: Saturday, November 13, 2021 5:02 PM
To: John Giamatteo <jig@blackberry.com>; John Chen <john.chen@blackberry.com>; Tony Lee <antlee@blackberry.com>; Alex Willis <awillis@blackberry.com>; Billy Ho <bho@blackberry.com>; Adam Enterkin <aenterkin@blackberry.com>; Karl Liebman <kliebman@blackberry.com>
Cc: Sasha Herakovic <sherakovic@blackberry.com>
Subject: Re: Cylance Product Issues

Great. Thank you.

I do engage with their CISO's (and some of their team members). And my team + support + guard + sales engineering, etc. engage with many people at [REDACTED]. There's a good understanding of what they need/is their highest priority.

We can provide a prioritized list. We went through that exercise with [REDACTED] for example a year+ ago and meet with them on it fairly regularly.

Alex has this but we can refresh it with the customers and the teams.

Neelam

Sent using BlackBerry UEM - the most secure and highest productivity mobility software

From: jjg@blackberry.com

Sent: November 13, 2021 4:46 PM

To: john.chen@blackberry.com; antlee@blackberry.com; awillis@blackberry.com; bho@blackberry.com; aenterkin@blackberry.com; nsandhu@blackberry.com; kliebman@blackberry.com

Cc: sherakovic@blackberry.com

Subject: RE: Cylance Product Issues

Thanks, JC...I will run with this with specific emphasis on [REDACTED].

We need to put a motion cross functional tiger teams and engage with the tech staff on prioritizing issues and functionality they are clamoring for, while Neelam and team provide air cover with the exec team. We will discuss more actions/alignment while we are all together on our staff call Monday morning.

Best regards,

JJG

From: John Chen <john.chen@blackberry.com>

Sent: Saturday, November 13, 2021 1:49 PM

To: Tony Lee <antlee@blackberry.com>; Alex Willis <awillis@blackberry.com>; Billy Ho <bho@blackberry.com>; Adam Enterkin <aenterkin@blackberry.com>; John Giamatteo <jjg@blackberry.com>; Neelam Sandhu <nsandhu@blackberry.com>; Karl Liebman <kliebman@blackberry.com>

Cc: Sasha Herakovic <sherakovic@blackberry.com>

Subject: Re: Cylance Product Issues

Team

We have so many people involve here

I will speak with JG to discuss the leadership and smaller team to tackle the two accounts as well as the bigger process

John G

Please give me a call, I will bum you the number

John

Sent from my BlackBerry - the most secure mobile device

From: antlee@blackberry.com

Sent: November 13, 2021 2:39 AM

To: john.chen@blackberry.com; awillis@blackberry.com; bho@blackberry.com; aenterkin@blackberry.com; jjg@blackberry.com; nsandhu@blackberry.com; kliebman@blackberry.com

Cc: sherakovic@blackberry.com

Subject: Re: Cylance Product Issues

Good day John,

If by algorithms, you mean FER intake process and prioritization then yes. We don't need to invent a feature request (FER) inbound process – we just need to copy the people that got it right.

Perfect example from Microsoft that allows submission, upvote, tracking, and more:

<https://ideas.powerbi.com/ideas/>

We currently perform this tracking using humans and disparate systems which does not paint an accurate picture of weighting and value of requests.

Hope that helps,
Tony

Tony Lee
Vice President, Global Services Technical Operations; Spark Division
Mobile: +1 (540) 558-8987
BlackBerry® Intelligent Security. Everywhere.

From: john.chen@blackberry.com
Sent: November 13, 2021 12:08 AM
To: awillis@blackberry.com; antlee@blackberry.com; bho@blackberry.com; aenterkin@blackberry.com; jjg@blackberry.com; nsandhu@blackberry.com; kliebman@blackberry.com
Cc: sherakovic@blackberry.com; antlee@blackberry.com
Subject: RE: Cylance Product Issues

Thanks Alex

Anyone has ideas to improve the algorithms ?? I will be happy to review

As a reminder to all, we set the FERs quota so we don't chase everything and end up doing none with poor quality and slip everyone. Some FERs are complex and some are relatively simple ; Alex will apply his knowledge on that as he outlines with sales consideration

John

From: Alex Willis <awillis@blackberry.com>
Sent: Friday, November 12, 2021 4:01 PM
To: John Chen <john.chen@blackberry.com>; Tony Lee <antlee@blackberry.com>; Billy Ho <bho@blackberry.com>; Adam Enterkin <aenterkin@blackberry.com>; John Giamatteo <jjg@blackberry.com>; Neelam Sandhu <nsandhu@blackberry.com>; Karl Liebman <kliebman@blackberry.com>
Cc: Sasha Herakovic <sherakovic@blackberry.com>
Subject: RE: Cylance Product Issues

Yes, I'm familiar. [REDACTED] make up a great deal of our SPL (attached: reviewed, responded to by PM) each round as they started with about 43 FERs all by themselves. Some have been delivered over the years and we focus on the highest priority remaining (about 8)

I help facilitate the SPL (top 10 UEM and top 25 UES) requests pulled from

- FERs that are blocking deals, weighted towards the number of customers asking for a particular request, deal value, etc
- Strategic customer requests – not necessarily a deal in play today but needed for future renewals, expansion

- Market demand – whether a customer demands or not, we know these are required or going to be required. An example is UES support for windows firewall configuration. We see this on many RFP's. We put this in the top 10 UES priority list and it's marked as "Future backlog" by PM

Very difficult to land on the perfect 10/25 items given we have so many requests to prioritize. The current SPL, submitted in October actually had:

UEM = 43 items. Of which, 1 is committed, 1 other is on the roadmap but not committed

UES = 57 items. Of which 0 are committed, 6 are on the roadmap but not committed.

What doesn't get delivered in this next version must be re-evaluated for submission on the next SPL (after next major release). Some go away as we lost the deal, others remain.

Also note, the SPL is a snapshot in time, submitted soon after a major release. We constantly receive (and try to work around) requests throughout the quarter via various sources. Anyone can enter an FER so I tend to focus on ones in the categories I listed up top

Alex

From: John Chen <john.chen@blackberry.com>

Sent: Friday, November 12, 2021 5:35 PM

To: Tony Lee <antlee@blackberry.com>; Billy Ho <bho@blackberry.com>; Adam Enterkin <aenterkin@blackberry.com>; John Giamatteo <jjg@blackberry.com>; Neelam Sandhu <nsandhu@blackberry.com>; Karl Liebman <kliebman@blackberry.com>; Alex Willis <awillis@blackberry.com>

Cc: Sasha Herakovic <sherakovic@blackberry.com>

Subject: RE: Cylance Product Issues

Alex

Are you familiar with this ? since you picked the top 20 FERS , I assume you are aware;
Any lights you are shed will be great

John

From: Tony Lee <antlee@blackberry.com>

Sent: Friday, November 12, 2021 1:09 PM

To: John Chen <john.chen@blackberry.com>; Billy Ho <bho@blackberry.com>; Adam Enterkin <aenterkin@blackberry.com>; John Giamatteo <jjg@blackberry.com>; Neelam Sandhu <nsandhu@blackberry.com>; Karl Liebman <kliebman@blackberry.com>

Cc: Sasha Herakovic <sherakovic@blackberry.com>

Subject: RE: Cylance Product Issues

Good afternoon John,

Per your request, please see the high-level customer views below for ABB and Schneider gathered from the field. We are doing our best to hold the accounts together via professional services and support, however I do not believe this will be enough – these customers are beyond the kind words of "strategy and partnership" and they want to see results. We all wish we could say these are issues of the past and we can move beyond them, however the continued instability (console, optics, syslog, SSL cert, etc.) combined with the product release issues (1580, 1584, Optics 3.0) are keeping wounds fresh for these customers (at least 2 new stability issues this week alone).

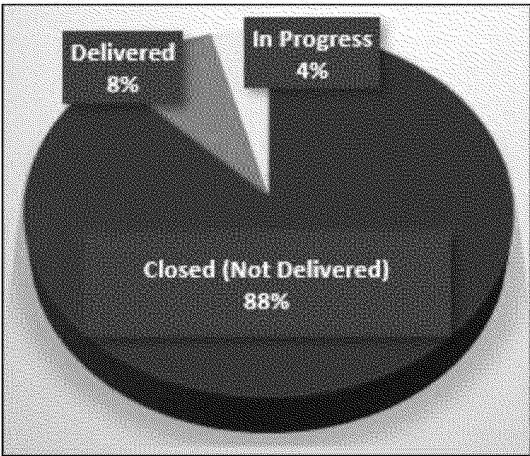
I understand the FER word below is not popular in the customer view below, however ABB in particular told us they do not want anymore "vision presentations" – they do want to see a locked in product roadmap with hard dates that cover some of the features they requested. These customers are angry and it shows in their email correspondence while they

hold very little back. Hugh (on Neelam’s team) has an excellent strategy to help steer the conversation away from specific FERs and more toward larger epics, but it is still too early to tell how effective it will be. You will notice a common theme below and honestly we can swap nearly any medium to large UES customer name in and it still applies. In fact, we just lost the [REDACTED] renewal and their reason for leaving was similar to [REDACTED], [REDACTED].

<ul style="list-style-type: none">• Failure to deliver on many of the FER’s they requested• Missed/inconsistent release cycles• New OS support -- Late support for new Mac OS in particular.• Kernel support very slow. Cannot install Protect as kernel not yet supported• Supportability of older protect versions• Old malware misses – Excel Macro – Need to execute on long-term fix• How are we improving the product? The quality?• 1580 concerns -- Felt 1540 was the last stable release of Protect• NOC stability• Optics performance issues• RCA’s for issues• Service availability notifications	<ul style="list-style-type: none">• Failure to deliver on many of the FER’s they requested or delayed (see below)• Missed/inconsistent release cycles• How are we improving the product? The quality?• New releases lack requested new features• Console issues when we have made changes e.g. memdef2/sc2• Old malware misses – Excel Macro• 1580 concerns• API and audit log limitations
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From the customer’s perspective (as for SE), please see the attached PowerPoint document. We looked up the present day status of the FERS they submitted and color coded them. Most, almost all, are *closed and marked as “Future Consideration”* (red) – with the exception of one in progress (yellow) and two that indicate that they are delivered (green). When any customer—especially our elite 30—sees that 92% of their feature requests (many of which they consider table stakes) are not delivered over the years then they lose hope and a renewal is unlikely. Hugh will only be so successful in changing the narrative – results will need to follow. I know we are all dedicated to our customer’s success so I am glad we were able to have this discussion. Our customers are very vocal in their concerns, now we need to gather, prioritize, and execute.

- In Progress = 1
- Delivered = 2
- Closed = 21



Hope that helps.

Thanks,
Tony

Tony Lee

Vice President, Global Services Technical Operations
BlackBerry Security Services
Mobile: +1 (540) 558-8987
BlackBerry® Intelligent Security. Everywhere.

From: John Chen <john.chen@blackberry.com>
Sent: Thursday, November 11, 2021 8:56 AM
To: Tony Lee <antlee@blackberry.com>; Billy Ho <bho@blackberry.com>; Adam Enterkin <aenterkin@blackberry.com>; John Giamatteo <jjg@blackberry.com>; Neelam Sandhu <nsandhu@blackberry.com>; Karl Liebman <kliebman@blackberry.com>
Cc: Sasha Herakovic <sherakovic@blackberry.com>
Subject: Re: Cylance Product Issues

Tony
Do you have a high level customer views of the recent product releases and the Marco misses etc

I like to take a look

John

Sent from my BlackBerry - the most secure mobile device

From: antlee@blackberry.com
Sent: November 11, 2021 5:44 AM
To: bho@blackberry.com; aenterkin@blackberry.com; jjg@blackberry.com; john.chen@blackberry.com; nsandhu@blackberry.com; kliebman@blackberry.com
Cc: sherakovic@blackberry.com
Subject: Re: Cylance Product Issues

Sounds great Billy. [REDACTED] are also quite unhappy with recent product releases, macro misses, and missing features -- we could use some support there as well.

Thanks for the assistance,
Tony

Tony Lee
Vice President, Global Services Technical Operations; Spark Division
Mobile: +1 (540) 558-8987
BlackBerry® Intelligent Security. Everywhere.

From: bho@blackberry.com
Sent: November 11, 2021 1:37 PM
To: aenterkin@blackberry.com; jjg@blackberry.com; john.chen@blackberry.com; nsandhu@blackberry.com; kliebman@blackberry.com
Cc: sherakovic@blackberry.com; antlee@blackberry.com
Subject: RE: Cylance Product Issues

Yes. We had several [REDACTED] calls with product SME in the past. We will continue to do it. Let's have a prep call and determine the topics and who from engineering. I can be available.

In fact, I have repeatedly suggested to resume/start the technical sessions with customers. They see what we're doing and making progress to support them.

Regards,
Billy

Sent with BlackBerry Work
(www.blackberry.com)

From: Adam Enterkin <aenterkin@blackberry.com>
Date: Thursday, Nov 11, 2021, 5:24 AM
To: Billy Ho <bho@blackberry.com>, John Giamatteo <jjg@blackberry.com>, John Chen <john.chen@blackberry.com>, Neelam Sandhu <nsandhu@blackberry.com>, Karl Liebman <kliebman@blackberry.com>
Cc: Sasha Herakovic <sherakovic@blackberry.com>, Tony Lee <antlee@blackberry.com>
Subject: RE: Cylance Product Issues

Thank you Billy.

Is there anyone that is a domain expert for Cyber on your team that you recommend we put in front of the customer? If not, that's okay, we can cover from sales but it sometimes is effective for a customer to hear directly from someone who owns the Product, especially when they are as big as [REDACTED] (350k+ end points)

Best regards,
Adam
+44 7557 244 581

Sent with BlackBerry Work

From: Billy Ho <bho@blackberry.com>
Date: Thursday, 11 Nov 2021, 12:57 pm
To: Adam Enterkin <aenterkin@blackberry.com>, John Giamatteo <jjg@blackberry.com>, John Chen <john.chen@blackberry.com>, Neelam Sandhu <nsandhu@blackberry.com>, Karl Liebman <kliebman@blackberry.com>
Cc: Sasha Herakovic <sherakovic@blackberry.com>, Tony Lee <antlee@blackberry.com>
Subject: RE: Cylance Product Issues

Let me send a separate email on [REDACTED]

You should have the update before Wednesday.

Regards,
Billy

Sent with BlackBerry Work
(www.blackberry.com)

From: Adam Enterkin <aenterkin@blackberry.com>
Date: Thursday, Nov 11, 2021, 2:28 AM

To: John Giamatteo <jig@blackberry.com>, John Chen <john.chen@blackberry.com>, Neelam Sandhu <nsandhu@blackberry.com>, Billy Ho <bho@blackberry.com>, Karl Liebman <kliebman@blackberry.com>
Cc: Sasha Herakovic <sherakovic@blackberry.com>, Tony Lee <antlee@blackberry.com>
Subject: RE: Cylance Product Issues

Thanks John G.
Agreed, one team and we are all in this together!

We have major challenges with the perception of the product, although I think it is largely due to two factors, tactical problems in our current product and lack of major advancement in our roadmap compared with CS and S1. Much of it is unfair but when every analyst is saying we are in the back of the pack, and then they experience small tactical problems, CISOs have a very difficult time defending why they chose to go with us to their managers. We hear this daily.

We need to come out swinging. We need a solid roadmap that shows how we are going to fix where we are in the market and these dec issues.

Billy, I am meeting with the Global CTO of [REDACTED] in person next Wednesday about this very topic in hopes of saving them as a customer. They are concerned about the following:

- How are we improving the product? The quality?
- Failure to deliver on many of the FER's they requested ([REDACTED] believed they would have more influence on prod dev)
- Missed/inconsistent release cycles
- New releases lack requested new features
- OS support. Late support in past for new Mac OS.
- Old malware misses
- Gartner Magic Quadrant results. Seems there is agreement in the industry that BB is not suitable for Enterprise requirements.
- 1580 concerns
- Memory bypasses
- Agents not connecting back to the console - How do we audit for this?

I would be delighted to have someone from your team who is an expert in Cyber and can help make them more comfortable with the above. Is there anyone you would volunteer to join who can address the above?

Again, we need solid answers to how we will fix and a roadmap that explains what we are doing that is compelling to them.

Best regards,
Adam
+44 7557 244 581

Sent with BlackBerry Work

From: John Giamatteo <jig@blackberry.com>
Date: Thursday, 11 Nov 2021, 2:50 am
To: John Chen <john.chen@blackberry.com>, Neelam Sandhu <nsandhu@blackberry.com>, Billy Ho <bho@blackberry.com>, Karl Liebman <kliebman@blackberry.com>
Cc: Sasha Herakovic <sherakovic@blackberry.com>, Tony Lee <antlee@blackberry.com>, Adam Enterkin <aenterkin@blackberry.com>
Subject: RE: Cylance Product Issues

Absolutely, John...we need to look at these items individually, determine root cause and remediate asap.

Billy is on point from a product standpoint, Karl, Sasha and Tony on point for customer engagement/communications and Neelam/Adam on point from a customer relations perspective.

We need a ONE team approach and focus on what is urgent and in front of us now vs. dwelling too much on the past.

More to come on this.

Best regards,
JJG

From: John Chen <john.chen@blackberry.com>
Sent: Wednesday, November 10, 2021 3:18 PM
To: Neelam Sandhu <nsandhu@blackberry.com>; Billy Ho <bho@blackberry.com>; John Giamatteo <jjg@blackberry.com>; Karl Liebman <kliebman@blackberry.com>
Cc: Sasha Herakovic <sherakovic@blackberry.com>; Tony Lee <antlee@blackberry.com>
Subject: RE: Cylance Product Issues

Hope you all could find a way to work together better. I know all of you want to do well for the company

John G , you can probably help here

John

Sent with BlackBerry Work (www.blackberry.com)

From: Neelam Sandhu <nsandhu@blackberry.com>
Sent: Nov 10, 2021 3:14 PM
To: Billy Ho <bho@blackberry.com>; John Chen <john.chen@blackberry.com>; John Giamatteo <jjg@blackberry.com>; Karl Liebman <kliebman@blackberry.com>
Cc: Sasha Herakovic <sherakovic@blackberry.com>; Tony Lee <antlee@blackberry.com>
Subject: RE: Cylance Product Issues

Billy,

Thank you. There have been and continue to be many internal discussions on these items (and more), e.g. the UES account reviews, the supportability council meetings, the weekly customer confidence emails, the dialogues in real-time as the issues are occurring, etc.

This is not about blame. The key here is how we retain our customers as the volume of issues is problematic and seemingly increasing. Just a couple of hours ago we received an email from [REDACTED] for example, saying "We are not receiving the alerts in Cylance from past 3+ hours."

We can call them BlackBerry issues, rather than distinguish between product issues and architecture issues or other nomenclature, and as we are all in this together and have the same objective of customer retention and revenue growth.

Neelam

From: Billy Ho <bho@blackberry.com>

Sent: Wednesday, November 10, 2021 1:39 PM

To: Neelam Sandhu <nsandhu@blackberry.com>; John Chen <john.chen@blackberry.com>; John Giamatteo <jig@blackberry.com>; Karl Liebman <kliebman@blackberry.com>

Cc: Sasha Herakovic <sherakovic@blackberry.com>; Tony Lee <antlee@blackberry.com>

Subject: Re: Cylance Product Issues

Neelam,

Before you jumped into conclusion "numerous issues related to the Cylance products" and sent this big email to everyone. You should get more details before criticize all these are product issues. You didn't bring these issues to me before. Otherwise, I'm more than happy to help you to understand.

Let me cut and paste what you said earlier and sent back to you – "it is impacting us as BlackBerry so we don't have the luxury of playing the blame game. We need to focus on working together to retain these customers and grow the business."

Please see my comment below. Please come by and we can sit down to discuss this.

Regards

Billy

From: Neelam Sandhu <nsandhu@blackberry.com>

Date: Wednesday, November 10, 2021 at 8:11 AM

To: John Chen <john.chen@blackberry.com>, John Giamatteo <jig@blackberry.com>, Billy Ho <bho@blackberry.com>, Karl Liebman <kliebman@blackberry.com>

Cc: Sasha Herakovic <sherakovic@blackberry.com>, Tony Lee <antlee@blackberry.com>

Subject: Cylance Product Issues

Dear All,

In the past month alone we have had numerous issues related to the Cylance products. I am summarizing just some of them here to give everyone a sense of how regularly our Cylance customers are experiencing notable product problems. The frequency appears to be increasing and customers are saying they have had enough.

Additionally, Reddit users are aware of the issues and have been posting about them on Reddit. (Mark Wilson is handling the Reddit piece per attached, in conjunction with relevant technical experts.)

November 9th

- UES EU console went down. Multiple customers impacted. Root cause not yet confirmed.
- For example, [REDACTED] 180,000 endpoints disappeared from their console today. Endpoints are reappearing but they have lost their configurations/zoning/policies/etc. and so will need to be re-mapped. Additionally, some endpoints may require a manual effort to re-add/re-register as they are not auto reappearing/reregistering. (We have a fix plan for [REDACTED].)

BHO>> So far, there is NO evidence it is product issue

BHO>> this instance happened on Tuesday 2am our time in the middle of the night. within the first 24 hours, CSO and Engineering are pull in to help customers to recover. I hope that customer appreciate the support.
BHO>> we just got the audit log this morning. From the audio log, it indicated someone is deleting 160,000 end-points.

November 9th (Also note the 1580 update at the bottom of this email. It is relevant as it is one of the versions customers are being advised to upgrade to)

- Customers informed by BlackBerry that Protect 1574 has a security vulnerability and they must upgrade to 1578 or later.
- However, older endpoints that are in use by customers (expensive, long life, endpoints that are hard to replace and are used by several of our customers) are not supported by Protect versions later than 1564.
- BlackBerry Engineering were asked if a hotfix version could be created for 1564 and the response currently is no. This will mean any customer that has a legacy OS machine [REDACTED] will have to either continue to use an affected version of BlackBerry Protect or decide to use another vendors solution. Furthermore, this means we have not given customers lead time/a notice period on this before the security vulnerability communication went out on November 9.
- Example affected customer: [REDACTED] currently have 10K endpoints, with a lot of SCADA systems which are managed by old Windows platforms. Testing of 1564 was successfully completed a few months ago to validate the impact of BlackBerry Protect on their devices to ensure that, the robots could still continue to build cars when Protect is running. [REDACTED] need to be able to use 1564 for 3-5 more years at least.

BHO>> 3 security vulnerabilities were report from external researcher to BBSIRT. Working closely with BBSIRT to provide the hotfix in 1578 before the vulnerability disclosure by the external researcher.

BHO>> Who said we didn't create hotfix for 1564? I replied to Adam Enterkin that we are looking into it. NS: This came from Engineering and Support.

BHO>> In fact, we should work as the trusted advisors, we should advise them to upgrade legacy Window platforms. They are NOT supported by Microsoft and have lot of vulnerabilities at the OS level.

October 28th

- Another customer impacted by macro virus. BlackBerry had decided not to build this functionality into Protect as we thought macro viruses are old virus types. It exists in OEM Engine/CylanceV and needs to be added to Protect.
- BlackBerry Engineering "looking to address this in upcoming releases, but that would be in Q1 2022 or later".
- Customers recently affected by old macro viruses: [REDACTED]

BHO>> This is why I repeatedly suggested to you that we can't talk to our customers at FER level (i.e. yes or no, what time). We need to engage them at engineering technical workshop level. We should walk through we're doing instead of just saying yes/no and what time. NS: We don't say yes/no.

BHO>> Protect is single-ML-model agent (on execution files). need to move Protect to a multi-ML- model agent (support both execution file and document file). Work in progress.

BHO>> the CylanceV doesn't support Excel. We need to look into AMSI to support Excel

BHO>> then UI changes to Venue console.

October 25th

- UES Console - Optics portion has no data and displays errors on multiple pages, such as Error 502.
- Many affected customers including Deloitte.

BHO>> It is NOT product issue.

BHO>> it is infrastructure related

October 20th

- Cylance console unable to be accessed by customers as BlackBerry accidentally let a Cylance infrastructure certificate expire.

• Customers saw the 'certificate expired' message in the console and said 'BlackBerry can't even get this right'. Screenshots made it on to Reddit https://www.reddit.com/r/Cylance/comments/qbzzrf/security_100/.

BHO>> Again, it is NOT product issue.

BHO>> it is infrastructure issue.

October 14th

- Customers after upgrading to Protect 1584 see IIS services crashing on endpoints.
 - CSO had recommended the IIS crash issue gate the release, but it was declined by PM/Engineering leadership due to other fixes needing to be released.
 - MSSPs (Cyberforce and Skout) report their customers' IIS crashes triggered a large number of helpdesk tickets. One Cyberforce customer claims they lost \$700K as a result.
- BHO>> Sorry you are wrong. IIS crash is NOT reported before we release.
- BHO>> Btw, CSO is part of the go-no-go decision. NS: This came directly from CSO.

October 13th for several days

- Optics syslog outage. This lasted a few days. Services impacted were e.g. Optics UI not populating – Optics Syslog, InstaQuery not loading the Zones.
 - Root cause was unoptimized code caused resource starvation. Resolution was to deploy additional hardware and optimize code to relieve starvation.
 - Impacted customers. Also meant Guard team lost visibility causing two incident response (IR) engagements to stall for several weeks for [REDACTED]
- BHO>> yes. this one is a product defect when we release Optics-3.0 that timing issue with one of the async operation.

September 23rd and 30th

- Multi-hour Cylance infrastructure incidents where customers are unable to see Cylance products to download from the deployment page in Venue for the EMEA region.
- BHO>> Yes. this one is a product defect with Venue cloud 1.51.

August 18th

- 1580 released in US and customers experiencing high volume of exploit block issues.
 - Before 1580, Macros showed up in Script Control as a module that could be easily disabled or tuned with wildcard exclusions. With 1580, they show up under memory protection as “Dangerous VBA Macro (Windows Only)” and this feature CANNOT be disabled. The only way to tune these is to completely exclude a given process (like excel.exe or msaccess.exe) which leads to much worse security posture as it effectively turns off Memory Protection monitoring for MS Office Products.
 - BlackBerry Engineering said: “The underlying implementation was changed significantly without thinking through all the consequences throughout the product. They acknowledged the miss due to the lack of clearly defined end-to-end requirements. A formal post-mortem may not be completed due to many of the key players no longer being at BlackBerry.”
- BHO>> it is more than a product defect issue. It is a Cylance methodology issue (from great ideas, reverse-engineering, to beta/EA process).

There have been other issues in this timeframe but the above list gives a flavor.

Neelam Sandhu

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Email: nsandhu@blackberry.com

From: Neelam Sandhu [nsandhu@blackberry.com]
Sent: 5/18/2023 10:59:20 AM
To: John Giamatteo [jig@blackberry.com]
Subject: RE: Analyst Day

At 38 minutes 38 seconds, of [this recording](#) you mention “We recently closed a long-term deal for Enterprise Software & Services across the entire portfolio with one of the G7 governments”.

I am looking to understand which G7 government you were referring to?

Thank you,
Neelam

From: John Giamatteo <jig@blackberry.com>
Sent: Thursday, May 18, 2023 8:14 AM
To: Neelam Sandhu <nsandhu@blackberry.com>; Mark Wilson <mark.wilson@blackberry.com>
Subject: RE: Analyst Day

Thanks.

We did not disclose this to anyone at the conference or any of the analysts in our follow-up calls.

JIG

From: Neelam Sandhu <nsandhu@blackberry.com>
Sent: Wednesday, May 17, 2023 5:04 PM
To: John Giamatteo <jig@blackberry.com>; Mark Wilson <mark.wilson@blackberry.com>
Subject: Analyst Day

Congratulations on a smooth event today!

During the Cyber update, JIG, you mentioned a G7 government deal that closed. Which government was that?

Thanks,

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